Amendments to the Claims:

Please delete claims 1-21 and add the following new claims:

1-21. (Deleted)

22. (New) A battery pack charge/discharge control apparatus for controlling charge/discharge of a battery pack that is formed by combining a plurality of unit batteries of a secondary battery type, comprising:

charge/discharge restriction device for restricting the charge/discharge based on at least one of a capacity upper limit value and a capacity lower limit value of the unit batteries constituting the battery pack;

remaining capacity detection device for detecting remaining capacities of unit batteries constituting the battery pack;

control value computation device for computing a control state-of-charge value based on at least one of a minimum value and a maximum value of the detected remaining capacities;

capacity difference computation device for computing, as a capacity difference, a remaining capacity difference between the remaining capacity of a first unit battery and the remaining capacity of a second unit battery among the unit batteries whose remaining capacities have been detected, the remaining capacity of the second unit battery being less than the remaining capacity of the first unit battery;

storage device for storing a correlation between the capacity difference and an apparent state-of-charge value that is different from the control state-of-charge value;

apparent state-of-charge value computation device for computing an apparent state-of-charge value with reference to the correlation based on the capacity difference; and

apparent state-of-charge value adoption device for adopting the apparent state-of-charge value if the capacity difference is at least a predetermined capacity difference that is stored beforehand

23. (New) The battery pack charge/discharge control apparatus according to claim **22**, wherein the capacity difference computation device

includes maximum remaining capacity detection device for detecting a unit battery having a maximum remaining capacity in the battery pack, and minimum remaining capacity detection device for detecting a unit battery having a minimum remaining capacity in the battery pack, and computes a remaining capacity difference between the maximum remaining capacity and the minimum remaining capacity as a capacity difference.

24. The battery pack charge/discharge control apparatus according to claim **22**, further comprising control state-of-charge value adoption device for adopting the minimum remaining capacity of the unit batteries constituting the battery pack or a percentage of the minimum remaining capacity to a fully charged capacity value, as a control state-of-charge value for controlling the battery pack, if the capacity difference is less than a pre-stored predetermined capacity difference.

25. (New) The battery pack charge/discharge control apparatus according to claim **22**, wherein if the capacity difference is at least a pre-stored predetermined capacity difference maximum value, the predetermined capacity difference maximum value is adopted instead of the capacity difference.

26. (New) The battery pack charge/discharge control apparatus according to claim **22**, wherein the correlation is expressed by Mathematical Expression (1):

$$SOC = \frac{SOCmid - SOClow}{Qhigh - Qlow - Qd} \times (Qmin - Qlow) + SOClow \qquad (1)$$

where SOC is the apparent state-of-charge value, and SOCmid is a control center value of the state-of-charge value, and SOClow is a lower limit set value of the state-of-charge value, and SOChigh is an upper limit set value of the state-of-charge value, and Qlow is a capacity value converted from SOClow, and Qhigh is a capacity value converted from SOChigh, and Qd is the capacity difference, and Qmin is the minimum remaining capacity, and Qmax is the maximum remaining capacity.

27. (New) The battery pack charge/discharge control apparatus according to claim **26**, wherein if in Mathematical Expression (1), the denominator on the right-hand side which is presented as Mathematical Expression (2) is at most a predetermined zero-cross reduction preventative value, the zero-cross reduction preventative value is adopted in place of the denominator expressed by Mathematical Expression (2):

Qhigh Qlow Qd (2)

28. (New) The battery pack charge/discharge control apparatus according to claim **26**, wherein if in Mathematical Expression (1), SOC becomes greater than a maximum guard value, the maximum guard value is adopted in place of the term on the left-hand side in Mathematical Expression (1).

29. (New) The battery pack charge/discharge control apparatus according to claim **26**, wherein if in Mathematical Expression (1), SOC becomes less than a minimum guard value, the minimum guard value is adopted in place of the term on the left-hand side in Mathematical Expression (1).

30. (New) A battery pack charge/discharge control apparatus for controlling charge/discharge of a battery pack that is formed by combining a plurality of unit batteries of a secondary battery type, comprising:

remaining capacity detector that detects remaining capacities of unit batteries constituting the battery pack; and

controller that restricts the charge/discharge based on at least one of a capacity upper limit value and a capacity lower limit value of the unit batteries constituting the battery pack,

computes a control state-of-charge value based on at least one of a minimum value and a maximum value of the detected remaining capacities,

computes as a capacity difference, a remaining capacity difference between the remaining capacity of a first unit battery and the remaining capacity of a second unit battery among the unit batteries whose remaining

capacities have been detected, the remaining capacity of the second unit battery being less than the remaining capacity of the first unit battery,

stores a correlation between the capacity difference and an apparent state-of-charge value that is different from the control state-of-charge value,

computes an apparent state-of-charge value with reference to the correlation based on the capacity difference, and the controller

adopts the apparent state-of-charge value if the capacity difference is at least a predetermined capacity difference that is stored beforehand.

31. (New) The battery pack charge/discharge control apparatus according to claim **30**, wherein the controller detects a unit battery having a maximum remaining capacity in the battery pack and a unit battery having a minimum remaining capacity in the battery pack, and computes a remaining capacity difference between the maximum remaining capacity and the minimum remaining capacity as a capacity difference.

32. (New) The battery pack charge/discharge control apparatus according to claim **30**, wherein the controller adopts the minimum remaining capacity of the unit batteries constituting the battery pack or a percentage of the minimum remaining capacity to a fully charged capacity value, as a control state-of-charge value for controlling the battery pack, if the capacity difference is less than a pre-stored predetermined capacity difference.

33. (New) The battery pack charge/discharge control apparatus according to claims **30**, wherein if the capacity difference is at least a pre-stored predetermined capacity difference maximum value, the predetermined capacity difference maximum value is adopted instead of the capacity difference.

34. (New) The battery pack charge/discharge control apparatus according to claim **30**, wherein the correlation is expressed by Mathematical Expression (1):

$$SOC = \frac{SOCmid - SOClow}{Qhigh - Qlow - Qd} \times (Qmin - Qlow) + SOClow \quad (1)$$

where SOC is the apparent state-of-charge value, and SOCmid is a control center value of the state-of-charge value, and SOClow is a lower limit set value of the state-of-charge value, and SOChigh is an upper limit set value of the state-of-charge value, and Qlow is a capacity value converted from SOClow, and Qhigh is a capacity value converted from SOChigh, and Qd is the capacity difference, and Qmin is the minimum remaining capacity, and Qmax is the maximum remaining capacity.

35. (New) The battery pack charge/discharge control apparatus according to claim **34**, wherein if in Mathematical Expression (1), the denominator on the right-hand side which is presented as Mathematical Expression (2) is at most a predetermined zero-cross reduction preventative value (Q3), the zero-cross reduction preventative value is adopted in place of the denominator expressed by Mathematical Expression (2):

Qhigh Qlow Qd (2)

36. (New) The battery pack charge/discharge control apparatus according to claim **34**, wherein if in Mathematical Expression (1), SOC becomes greater than a maximum guard value, the maximum guard value is adopted in place of the term on the left-hand side in Mathematical Expression (1).

37. (New) The battery pack charge/discharge control apparatus according to claim **34**, wherein if in Mathematical Expression (1), SOC becomes less than a minimum guard value, the minimum guard value is adopted in place of the term on the left-hand side in Mathematical Expression (1).

38. (New) A battery pack charge/discharge control method for controlling charge/discharge of a battery pack that is formed by combining a

plurality of unit batteries of a secondary battery type, comprising the following steps of:

restricting the charge/discharge based on at least one of a capacity upper limit value and a capacity lower limit value of the unit batteries constituting the battery pack;

detecting remaining capacities of unit batteries constituting the battery pack;

computing a control state-of-charge value based on at least one of a minimum value and a maximum value of the detected remaining capacities;

computing, as a capacity difference, a remaining capacity difference between the remaining capacity of a first unit battery and the remaining capacity of a second unit battery among the unit batteries whose remaining capacities have been detected, the remaining capacity of the second unit battery being less than the remaining capacity of the first unit battery;

storing a correlation between the capacity difference and an apparent state-of-charge value that is a state-of-charge value different from the control state-of-charge value;

computing an apparent state-of-charge value with reference to the correlation based on the capacity difference; and

adopting an apparent state-of-charge value if the capacity difference is at least a predetermined capacity difference that is stored beforehand.

39. (New) A battery pack charge/discharge control program that is read into a computer so as to control charge/discharge of a battery pack that is formed by combining a plurality of unit batteries of a secondary battery type, comprising:

restricting the charge/discharge based on at least one of a capacity upper limit value and a capacity lower I imit value of the unit batteries constituting the battery pack;

detecting remaining capacities of unit batteries constituting the battery pack;

computing a control state-of-charge value based on at least one of a minimum value and a maximum value of the detected remaining capacities;

computing, as a capacity difference, a remaining capacity difference between the remaining capacity of a first unit battery and the remaining capacity of a second unit battery among the unit batteries whose remaining capacities have been detected, the remaining capacity of the second unit battery being less than the remaining capacity of the first unit battery; and

computing an apparent state-of-charge value that is different from the control state-of-charge value, with reference to a correlation between the capacity difference and the apparent state-of-charge value.